

**REMARKS**

Reexamination and reconsideration of the present application are requested.

By this Amendment, Applicants: amend claims 1, 3, and 5; cancel claims 2 and 10-20 without prejudice or disclaimer of the underlying subject matter; and add new claims 21-24. Accordingly, claims 1, 3-9 and 21-24 remain pending in the application.

**35 U.S.C. § 112**

The Office Action rejects claims 8 and 9 under 35 U.S.C. § 112.

Claims 8 and 9 depend from claim 1. Claim 1 as amended provides proper antecedent basis for “the back-flow preventing gas” recited in claims 8 and 9

Accordingly, Applicants respectfully request that the Examiner withdraw the rejections of claim 8 and 9 under 35 U.S.C. § 112.

**35 U.S.C. § 102/103**

Applicants respectfully submit that the pending claims are all patentable over any combination of the cited prior art for at least the following reasons

Aitani et al. is directed toward an apparatus and method capable of exactly detecting the end point of a cleaning process. As noted in the Office Action, Aitani et al. do not disclose preventing a deposition gas from flowing back toward a cleaning gas supply line.

Taketa et al. disclose preventing a deposition gas from flowing back toward a cleaning gas supply line by opening or closing of two valves. However, Taketa et al. does not disclose or suggest preventing a deposition gas from flowing back toward a cleaning gas supply line by introducing a back flow preventing gas.

Meanwhile, Osada et al. is directed toward an apparatus wherein a cleaning gas is prevented from sticking to an inner wall of the apparatus. The Office Action fairly admits that Osada et al. does not disclose preventing a deposition gas from flowing back toward a cleaning gas supply line. The Office Action states that one of ordinary

skill in the art “would have been able” to modify Osada et al. to include such a feature.

However, Applicants respectfully submit that whether or not one of ordinary skill in the art “would have been able” to modify a reference to produce the claimed invention is not the test for patentability under 35 U.S.C. § 103. Indeed, M.P.E.P. § 2143.01 clearly states that:

“FACT THAT THE CLAIMED INVENTION IS WITHIN THE  
CAPABILITIES OF ONE OF ORDINARY SKILL IN THE ART IS  
NOT SUFFICIENT BY ITSELF TO ESTABLISH PRIMA FACIE  
OBVIOUSNESS”

Instead, M.P.E.P. § 2143.01 also states that:

“THE PRIOR ART MUST SUGGEST THE DESIRABILITY OF THE  
CLAIMED INVENTION”

That is, the prior art (and not a hindsight view of Applicants’ claimed invention) must supply motivation for one skilled in the art to have made the proposed modification.

Applicants respectfully that the Office Action has not provided such a motivation from the prior art.

Furthermore, in the method of claim 1, the chamber pressure during deposition is lower than it is during cleaning. Accordingly, because the chamber pressure is decreased, during deposition the amount of deposition gas flowing back toward the cleaning gas supply line can be greater than the amount of cleaning gas flowing back to the depositing gas supply line during cleaning. Accordingly, during deposition the method of claim 1 introduces a back flow preventing gas into the process chamber through the cleaning gas supply line to prevent the deposition gas from flowing back toward the cleaning gas supply line Osada and the other prior art references fail to

recognize this situation, to consider the amount of gas flowing back according to the chamber pressure, or to disclose such a feature as in claim 1.

### CONCLUSION

In view of the foregoing explanations, Applicants respectfully request that the Examiner reconsider and reexamine the present application, allow claims 1, 3-9 and 21-24, and pass the application to issue. In the event that there are any outstanding matters remaining in the present application, the Examiner is invited to contact Kenneth D. Springer (Reg. No. 39,843) at (703) 715-0870 to discuss these matters.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 50-0238 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17, particularly extension of time fees.

Respectfully submitted,

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By: \_\_\_\_\_

  
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